

5159560



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D6104-007
Job Sheet 191197



Part No: D6104-007

Job Qty: 12 pcs

Part Name: Round Billet, 17-4



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/22/19

Job Tracking No:

Due Date: 3/18/19

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV B

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier Lead Time	
100	Purchasing	12 pcs	3/18/19	0.00	0.00	Purchasing - 1		At 19/03/06
						Purchasing - 2		
						Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	12 pcs	3/18/19	0.00	0.00	Packaging 2 - 1 - B4B		
						Packaging 2 - 2 - B4B		
						Packaging 2 - 3 - B4B		
						Packaging 2 - 5 - B4B		
						Packaging 2 - 4 - B4B		
						Packaging 2 - 6 - B4B		
						Packaging 2 - 7 - B4B		
						Packaging 2 - 8 - B4B		
						Packaging 2 - 9 - B4B		
						Packaging 2 - 10 - B4B		
						Packaging 2 - 11 - B4B		
						Packaging 2 - 12 - B4B		
						Packaging 2 - 13 - B4B		
						Packaging 2 - 14 - B4B		
						Packaging 2 - 15 - B4B		
						Packaging 2 - 16 - B4B		
						Packaging 2 - 17 - B4B		
						Packaging 2 - 18 - B4B		
						Packaging 2 - 19 - B4B		
						Packaging 2 - 20 - B4B		
						Packaging 2 - 21 - B4B		
						Packaging 2 - 22 - B4B		
						Packaging 2 - 23 - B4B		
						Packaging 2 - 24 - B4B		
						Packaging 2 - 25 - B4B		
						Packaging 2 - 26 - B4B		
						Packaging 2 - 27 - B4B		
						Packaging 2 - 28 - B4B		

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120	QC 18	12 pcs	3/18/19	0.00 0.00	Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
					QC 18 - 12	
130	Packaging 3-1 - Stock - B4B	12 pcs	3/18/19	0.00 0.00	QC 18 - 14	
					QC 18 - 22	
					QC 18 - 25	
					QC 18 - 42	
					QC 18 - 48	
					QC 18 - 58	DAS
					QC 18 - 61	61
					QC 18 - 9	9-89
					Packaging 3 - 1 - B4B	BM - A19-03-06
140	QC 21 - SA	12 pcs	3/18/19	0.00 0.00	Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
140	QC 21 - SA	12 pcs	3/18/19	0.00 0.00	QC 21 - SA - 21	DAG
					QC 21 - SA - 70	21
					QC 21 - SA - 53	9-89

Part Op 100 - (Purchasing) Issue P/O: 042684 b) Ø4.50" x 5.10" long
 Descriptions: 110 - (Receive & Inspect for Damage & Mat'l Certs) Ensure material certification is attached
 120 - (QC18 In-Coming Inspection Material) Ensure Material certification comply to Dwg D6104

130 - (Identify as per dwg & Stock Location: _____)
140 - (QC21- Final Inspection - Work Order Release)

CT X12 19-02-22

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6104-007P	17-4 SS Roundbar 4.50"Od	12 pcs (1 ea)	100-Purchasing	5159550

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6104-007P	12	0	0

Part Specifications

Specifications could not be found.

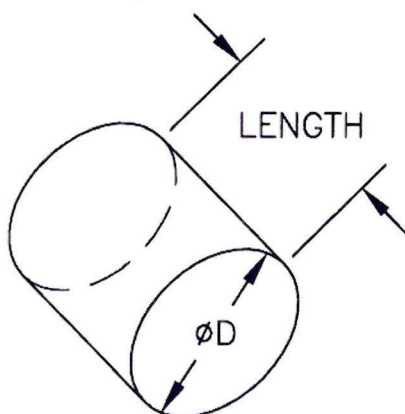
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DESIGN [Signature]	DRAWN BY [Signature]	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D6104	Rev. B SHEET 1 OF 1
DATE 02.11.25		TITLE ROUND BILLET, 17-4	SCALE NTS
A	01.04.10	NEW ISSUE	
B	02.11.25	CLARIFY ALLOY SPEC ADDED D6104-009/-011 REDUCE LENGTH OF BILLETS	

RELEASED
02.11.29 [Signature]

SPECIFICATION CONTROL DRAWING



MATERIAL: 17-4 PH SS (AMS 5643 OR AISI 630) MIN UTS = 170 KSI (38 HRc)

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, DIAMETER x LENGTH (+0.030/-0.000) AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES

Part No.	Alloy	D (Diameter)	Length
D6104-001	17-4 PH STAINLESS STEEL	Ø3.00	3.80
D6104-003	17-4 PH STAINLESS STEEL	Ø3.25	3.80
D6104-005	17-4 PH STAINLESS STEEL	Ø4.00	5.10
D6104-007	17-4 PH STAINLESS STEEL	Ø4.50	5.10
D6104-009	17-4 PH STAINLESS STEEL	Ø5.25	4.10
D6104-011	17-4 PH STAINLESS STEEL	Ø6.50	4.10

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042684



Supplier: MEC002-VU
Metaux Castle
P.O. Box 4090 Str A
Toronto
ON
M5W OE9 Canada

PO No: PO042684
PO Date: 2/22/19
Due Date: 3/18/19
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

E-MAILED

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	191058	D6101-005P		7075-T7351 8.25X5.0X2.5 : Various STC's AS PER DWG.D6101 REV.B SIZE: 5.00" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG 5.00" LENGHT MATERIAL: 7075-T7351 QQ-A-250/12 TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	3/18/19	40 pcs	0 pcs	40 pcs	\$40.54/pcs	\$1,621.60
2	191059	D6101-007P		7075-T7351 8.25X7.75X2.5 : Various STC's AS PER DWG D6101 REV. B MATERIAL: 7075-T7351 (QQ-A-250/12) SIZE: 7.750" X 8.250" X 2.50" THICK GRAIN DIRECTION ALONG: 7.750" LENGTH TOLERANCE AS PER QUOTE +.030"/-.000"	Firmed	-	3/18/19	40 pcs	0 pcs	40 pcs	\$61.72/pcs	\$2,468.80



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042684



Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
3 ✓ AM	191092	D6103-003P		Round Alum Billet : Various STC's AS PER DWG D6103 REV. B MATERIAL: 7075-T7351 AS PER QQ-A-225/9 SIZE: 3.500" X 12.500" LONG	Firmed	-	3/18/19	20 pcs ✓ 22x	0 pcs	20 pcs AT 19/02/27	\$60.40/pcs	\$1,208.00
4 ✓ AM	191197	D6104-007P		17-4 SS Roundbar 4.50"Od : Various STC's	Firmed	-	3/18/19	12 pcs ✓ 12x	0 pcs	12 pcs AT 19/03/06	\$68.53/pcs	\$822.36
Grand Total:												\$6,120.76

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

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**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

Shipment No:3842445

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped 04-MAR-19	F.O.B. ORIGIN	Freight Terms Prepaid		Carrier MANITOULIN		BOL No 3842445-2	

Shipment Details	Final Destination Branch - TOR
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Order No	Line No	Item No	Description	
5414898	1	14998.MO	4.5000.RD.17CR-4NI.STAINLESS.RT.SOL TR.COND A.132.0000-156.0000 CUT TO 5.1 IN (+ .1250/- .0000 IN) - BAND SAW CUTTING SPECIFICATIONS: AMS 5643	
Purchase Order No		Part Number	Ordered Qty	Invoice Qty
42684		YOUR ITEM NUMBER: D6104-007	12.00 PCS	12.00 PCS

Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS
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Delivery No. 122575349	Mill/Source NORTH AMERICAN STAINLESS	Heat Number 	Mech Id	PCS 12	Width (IN)	Length (IN)	Shipped Qty(LBS) 283.7116
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We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Date Printed: 04-MAR-2019 02:29:13 PM

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Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 2 of 2

Reviewed by Authorized Castle Metals Representative:		Date:	Name:
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MAR 04 2019

Skalov





**NORTH AMERICAN
STAINLESS**

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 481122 12	Mail To:	Ship To:	Date: 2/05/2019	Page: 1 of 1
	A.M. CASTLE AND COMPANY	A.M. CASTLE AND COMPANY	Steel: 630 (17-4)	
	1420 KENSINGTON ROAD-SUITE 220	26800 MILES ROAD	Finish: Hot Finish	
	OAK BROOK IL 60523	BEDFORD HEIGHTS OH 44146	Dia/Thk: 4.5000 in	
Customer: 0032 005			Leg Length:	
NAS Order: LP 97790 1	Red Ratio: 3.7 :1	Heat Treat Code: 51,573	Length: 144.00 in	
Your Order: 490547-1	Item Code: 14998		Corrosion:	

PRODUCT DESCRIPTION:

Round Bar, Hot Rolled, Annealed, Rough Turned
UNS S17400; EN 10204 3.1, ASTM A484/18, MACRO OK, AMS 5643/V
ASTM A564/13e1, AMS 2303/F, ASME SA564/13, ASTM F899/12B
SOL. ANNEALED @ 1900F MIN FOR 1 HR MIN. AND AIR COOLED TO RT
UT PER API6A PSL3, ASTM A388/S1 CRITERIA, UT PASSED
H900 MECH. PROPERTIES ARE CAPABILITY ONLY*

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight	Bundle Weight
BK15956	2547	BK15959	2558						

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	Supplier Heat	CM	C %	CB %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
A67V		US	.013	.231	.05	15.05	3.32	.81	.022	.021	4.41	.019
			S %	SI %	TA %	TI %						
			.0138	.53	.0050	.0025						

MECHANICAL PROPERTIES

	1 d o i c r	HB No.	Grain No.	Ferrite %	TS-900CAP KSI	YS-900CAP KSI	EL-900CAP % 4D	RA-900CAP %	RC-900CAP No.	FREQ. No.	SEV. No.
BK15956	R L	321.0	8.0	.25	199.01	177.79	10.83	41.33	42.0	.04	.02
BK15959	R L	321.0	8.0	.25	199.01	177.79	10.83	41.33	42.0	.04	.02

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6104-007
 DATE: 19/03/16

PO / BATCH NO.: P0042684/S159560

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12x
 QUANTITY INSPECTED: 12x
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 4.50"
 THICKNESS RECEIVED: 4.54"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	AMS 5643
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	LT: A670
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 61</u> DATE: <u>9-89</u> MAR 06 2019	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in